

AB VOLVO PENTA

EXECUTIVE ORDER U-R-014-0170 New Off-Road Compression-Ignition Engines Page 1 of 2

Pursuant to the authority vested in California Air Resources Board by Sections 43013, 43018, 43101, 43102, 43104 and 43105 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-14-012;

IT IS ORDERED AND RESOLVED: That the following compression-ignition engines and emission control systems produced by the manufacturer are certified as described below for use in off-road equipment. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	ENGINE FAMILY	DISPLACEMENT (liters)	FUEL TYPE	USEFUL LIFE (hours) 8000			
2019	KVPXL10.8CJA	10.8	Diesel				
SPECIAL	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT	APPLICATION			
	c Direct Injection, Electro Charge Air Cooler, Turt ff Limiter, Selective Cata Exhaust Gas Reciro	ocharger, llytic Reduction-Urea,	Crane, Loader, Pump, Compressor, Generator Set				

The engine models and codes are attached.

The following are the exhaust certification standards (STD), or family emission limit(s) (FEL) as applicable, and certification levels (CERT) for non-methane hydrocarbon (NMHC), oxides of nitrogen (NOx), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NOx), carbon monoxide (CO), and particulate matter (PM) in grams per kilowatt-hour (g/kW-hr), and the opacity-of-smoke certification standards and certification levels in percent (%) during acceleration (Accel), lugging (Lug), and the peak value from either mode (Peak) for this engine family (Title 13, California Code of Regulations, (13 CCR) Section 2423):

RATED POWER CLASS	EMISSION STANDARD CATEGORY			OPACITY (%)						
			NMHC	NOx	NMHC+NOx	со	PM	ACCEL	LUG	PEAK
130 ≤ kW ≤ 560	Tier 4 Final	STD	0.19	0.40	N/A	3.5	0.02	N/A	N/A	N/A
		FEL	N/A	N/A	N/A	N/A	0.03	N/A	N/A	N/A
		CERT	0.01	0.31		0.2	0.03	-	-	-

BE IT FURTHER RESOLVED: That the family emission limit(s) (FEL) is an emission level declared by the manufacturer for use in any averaging, banking and trading program and in lieu of an emission standard for certification. It serves as the applicable emission standard for determining compliance of any engine within this engine family under 13 CCR Sections 2423 and 2427.

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the information and materials to demonstrate certification compliance with 13 CCR Section 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control system warranty).



AB VOLVO PENTA

EXECUTIVE ORDER U-R-014-0170 New Off-Road

New Off-Road Compression-Ignition Engines Page 2 of 2

Engines certified under this Executive Order must conform to all applicable California emission regulations.

This Executive Order is only granted to the engine family and model-year listed above. Engines in this family that are produced for any other model-year are not covered by this Executive Order.

Executed at El Monte, California on this

day of December 2018.

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

ATTACHMENT 1 CF 1

Engine Model Summary Template

60 #: UR-014-0170 Date: 12/05/2018

L'UZC	10-1-21								
		2.Engine Model	3.BHP@RPM	4.Fuel Rate: mm/stroke @ peak HF	5.Fue (lbs/hr)	el Rate: ② peak HP 6.Torque @ RF	7.Fuel mm/strok	Rate: e@peak	8.Fuel Rate: 9.Emission Control nr)@peak torqu@evice Per SAE J1930
Engine Family	Code		(SAE Gross)	(for diesel only)	(for die	sels only) (SEA Gloss)	torg	ue (IDS/I	11/1@peak torque evice Fel SAE 31930
KVPXL10.8CJA	ı	TAD1170 VE			119	1581 Nm@1260	212	90	DDI,EM, ECM, CAC, TC, SPL, SCR-U, EGR
KVPXL10.8CJA	11	TAD1171 VE	355@2100	185	131	1785 Nm@1260	234	99	DDI,EM, ECM, CAC, TC, SPL, SCR-U, EGR
KVPXL10.8CJA	111 2	* TAD1172 VE	382@1700	233	133	1938 Nm@1260	255	108	DDI,EM, ECM, CAC, TC, SPL, SCR-U, EGR

* TESTED ENGINE MODEL